Learning Methods and Procedures

Land south of Steinbrook House, Swindon Road, Kington Langley, Chippenham, Wiltshire

Introduction

By way of background, full planning permission (ref: 20/04524/FUL) was granted on 20 April 2021 for the following description of development:

"Full planning application for the erection of a single dwelling of exceptional quality and innovative nature of design and creation of new access and associated landscaping."

This application seeks to gain approval to address a full discharge of condition 15 attached to the full planning permission. Condition 15 states the following:

"Prior to commencement of the development hereby permitted, details of the methods and procedures for publicly sharing the methods used and lessons learned from both the design, development and post occupation lessons, shall be submitted to and approved in writing by the Local Planning Authority. The approved document shall be made publicly available as agreed in perpetuity.

REASON: To ensure that the construction of this dwelling has opportunity to raise standards of design in rural areas."

This document is therefore submitted to address the requirements of this condition. The aim of this document is to show how the knowledge and lessons learnt from the project will be shared with the wider community. We seek to create a legacy of the research, study and consultations with accessibility experts that have informed and created this innovative design.

A range of learning methods and procedures have been carefully designed to maximise engagement with a range of stakeholders including local people and educational institutions.

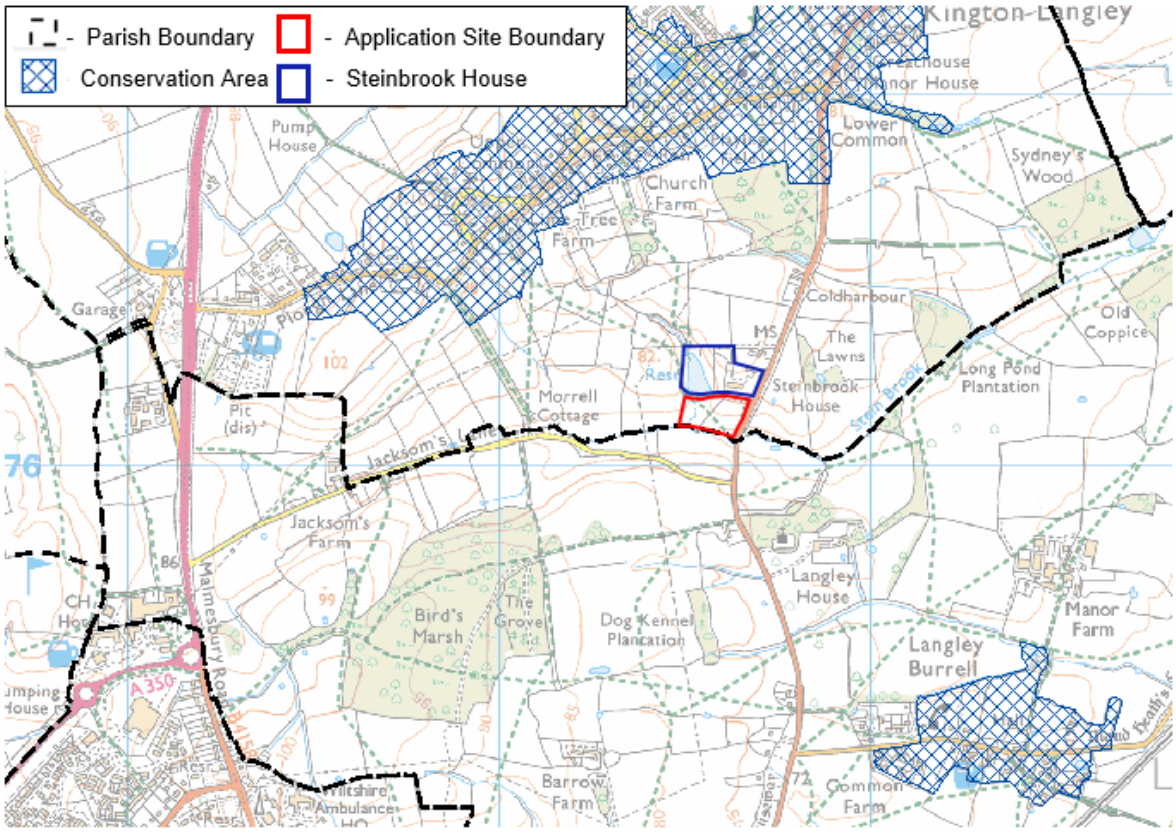
Site Context

The site lies within the open countryside and in an isolated location; approximately 820m to the south of the village of Kington Langley and over 1km to the north west of Langley Burrell, Chippenham. As shown in the map below, the site falls on the parish boundary for Kington Langley, with Stein Brook acting as the boundary between the two villages. The site is located to the south of Steinbrook House. The site location plan in Appendix 1 and confirms the extent of the red line and blue ownership.

The site, circa 1.68ha, is positioned on a south facing slope of the Stein Brook Valley. It is broadly rectangular in shape, and is split into three grassed 'fields' by existing vegetation. The eastern field, the largest of the three, and where the proposed dwelling is proposed to be positioned, is separated from the adjoining fields by a low post and wire fence and partial hedgerow. The central field is separated from the western most field by a steeply sided drainage ditch. Topographically, the site slopes steadily downwards from north to south. This landform is typical of the undulating, sloping topography found within the wider landscape.

There is an existing vehicular access to the site located on the eastern boundary, approximately 80m to the north of Stein Brook. It comprises a field access with a gravel surface leading to a gate.

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About the Architect

Bindloss Dawes is an architecture studio based in Bruton, Somerset. Founded in 2018 by Architects Oliver Bindloss and George Dawes, the practice has a wealth of experience delivering projects in Somerset and the South West including new homes, Class Q barn conversions and sensitive extensions and refurbishment of listed buildings.

At the centre of our approach is the desire to produce beautifully crafted and thoughtful architecture. We collaborate with designers and makers that we know and trust, and work closely with our clients to deliver buildings and spaces that sensitively serve their needs, whilst striving for permanence and quality.

The Design Process

Overall, the design process took 13 months, spanning from May 2019 up to June 2020, when the planning application was submitted. The whole design process and how the scheme was revised it outlined below.

Concept Design

- Single storey housing sitting on the slope.
- Breaking up massing to avoid house appearing monolithic.
- Rectangular blocks grouped around a circulation route with rooms to the south with views and ancillary spaces to the north.
- Consideration of the placement and orientation on the site and how close to the road the house would should be.

Initial Pre-Application Submission: July 2019

- Developed a compact building twisting and following the contours of the hill.
- Level accessible garden.
- Main entrance was located from the north and in the centre of the house.
- Siting house on a solid plinth with the main part of the house being a simple timber frame construction.
- Deep fins to break up the elevation and part where there are large openings.

More Open Redesign

- More compact scheme to reduce travel distances for residents.
- Consideration of the orientation of the site and potential for solar gain in the winter as well as light and views throughout the year.
- Pavilion / bird hide at the end of the garden as a focal point.

Material Concept

- Stone, dark brick and red bricks considered and discounted.
- Similar hue of materials to local buildings including the Union Chapel.
- Explored a brick and timber composition.

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Revised Pre-Application Submission: December 2019

- Open house with varied views and changing volumes.
- Desire for light and volume.

Design Review Panel presented scheme

- Virtual presentation to South-West Design Review Panel who made several comments and suggestions.
- Diagonal hedge traversing the landscape was not supported and was subsequently removed.
- Strengthening of landscaping and biodiversity enhancements to the site.
- Further consideration of the character and the surrounding context.

Planning Application

The planning application was submitted in June 2020. Following consultee comments and a revised submission, it successfully demonstrated how the proposed house will meet and surpass criteria 79e[1] of the NPPF:

Is truly outstanding or innovative,

- Every aspect of the proposal has been meticulously designed to ensure disabled people can experience the space as able bodied people would and live independently. The proposal aims to overcome this with inclusive design considered from the outset, embedded into the design & building fabric; offering a truly outstanding and innovative solution.
- Sophie Morgan, a disability advocate, who is a specialist in inclusive design recognises this design as a unique proposal at the forefront of accessible design making it a unique, outstanding and innovative proposal.
- The project is sustainable for the future. With timber frame construction and low embodied energy, designed with strong walls and ceilings for adaptions in the years ahead. There are also renewable energy sources for a zero carbon emission building and a light touch landscape design to protect the wildlife on the site.

Reflecting the highest standards in architecture,

- The design team, including the architects Bindloss Dawes, have designed and delivered a series of award winning high quality energy efficient homes, including RIBA National Award

[1] Paragraph 84(e) of NPPF (2023)

winning design. They have drawn on their experience to ensure the proposed development achieves the highest design standards.

- The proposal is for a beautifully crafted and thoughtful piece of contemporary architecture where the brick and timber combine into a strong tectonic, where the building nestles into the woodland backdrop but also reflects the distinctive characteristics of the local vernacular without being a pastiche.

- Upbrook House achieves zero carbon emissions through the proposed design providing exemplary performance. It achieves these goals using straight-forward measures that are replicable. This is important in the context of the wider housing market which also has to achieve increasingly demanding CO2 cuts, and will be looking to projects such as this to demonstrate viability.

- In the past solutions to the constraints of wheelchair confinement focus solely on practical design. It has been our aim to design a home for disabled people that can 'lift the spirit' solving the practical issue but within an architecture that carefully manipulates space and light.

Would help to raise standards of design more generally in rural areas

- The proposal will act as an exemplar dwelling, helping to raise the standards of design more generally by providing accessible solutions (in both a physical and financial sense) which can be incorporated into future house types to ensure inclusive design is considered from the outset and avoid clinical and functional dwellings.

- Wiltshire has a history of contemporary architecture, including Crescent House near Winterbrook (1997) and Smithson's house 'Upper Lawn' (1958). However, examples of such quality are rare and historic, and it is considered that the proposed development would provide an example of a dwelling that would push the boundaries for accessible residential design within Wiltshire.

- The previous consented paragraph 79 / 55 / PPS 7 dwellings in Wiltshire have been of a neo-classical design. Therefore, this dwelling will provide a unique, contemporary dwelling within the rural Wiltshire landscape.

- The proposal aims to continue the legacy of all the research, study and consultations with accessibility experts and share the lessons learnt to formulate this into a checklist in order to contribute to advocacy of issues of accessibility.

- We are proud of this proposal and want to promote the design and what we have learnt from research and working as a team on this project. Wiltshire is leading the way with inclusive accessible design where Horatio's Garden has grown from Salisbury Hospital to encompass five other Hospitals with more on the way. We hope this house will inform the design of many others.

- We have explored potential ways to publicise the learning outcomes and knowledge gained to the wider public to ensure the knowledge is shared, and thus, help raise standards of design. The Design Review Panel have been invited by the client to visit the completed project so that

they can learn and encourage other projects they review in the future. We also intend to publish the project through its own website so the design is shared with anyone who may wish to learn from it can. We have also liaised with Wiltshire College, with the potential to offering a lecture outlining the rationale for the dwelling, design process and outcomes.

Would significantly enhance its immediate setting

- A comprehensive landscape and planting scheme has been designed to significantly enhance the landscape, integrate the building into its setting, whilst delivering a meaningful space for disabled people to enjoy. The landscape led proposals are for a light touch design with a modest accessible garden close to the house but with most of the site retained as a natural wild habitat. Existing assets such as hedgerows will be increased, and the existing field will have enhanced maintenance and will be improved with additional planting.

- The proposal has been landscape-led and is underpinned by important landscape and ecological enhancements.

- Like the House Martin's that nest in the eaves and porch of Steinbrook House, we propose to incorporate habitats into the fabric of the building with bat boxes, bird boxes and bee bricks to increase habitats.

And be sensitive to the defining characteristics of the local area

- The Design Review Panel have supported the site as suitable for a Para 79e dwelling and the placement of the house on the site. One of the reasons they support this site as suitable is with the rolling hills in the local landscape context view of the site are minimal. The Landscape Visual Assessment (LVA) demonstrates how the dwelling can be assimilated into the surrounding landscape with minimal permanent adverse landscape or visual effects.

- The dwelling has been designed so that it seamlessly assimilates into the surrounding landscape and creates a high-quality design in harmony with the surroundings. A combination of existing and proposed vegetation and changes in topography act to screen the intervening landscape between the site and possible visual receptors. The field boundary vegetation creates a sense of enclosure and enables the development to have a discrete presence within the landscape. The viewpoints in the LVA demonstrate no high level of visual effects will be experienced and the dwelling is only ever visible against a wooded backdrop and never forms the skyline.

- The materials of building have been chosen to suit the distinctive character of local buildings. The proposed brick material has taken its cue from local building like the Union Chapel in Kington Langley.

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Learning Methods and Procedures

A detailed process of engagement, which uses a variety of methods to share the lessons that have been learnt, is set out below.

1. Site Visit

    - Offering Wiltshire Council Planning and Heritage Officers, Wiltshire Council Committee Members, the South West Design Review Panel (**https://www.designwest.org.uk/**) and the educational institutions (set out further below in this statement) the opportunity to visit the site within 3 months of practical completion of construction.

    - One hour guided tour by the architect and/or client, which will included a review of the building's interior, exterior and landscaped garden.

    - Production of virtual site visits which will then be shared via the publicly accessible website. This will also occur within 3 months of practical completion of construction.

2. Website

    - A website will be set up by the owners and/or architects to showcase the background to the project and how this influenced the design.

    - The pre-application process will be made available, showing how the design developed and evolved (which includes the above text).

    - The approved planning documentation will be made available including:

        - Site Location Plan – PROW – 115_PL_001 B
        - Existing Block Plan – 115_PL_002 B
        - Proposed Block Plan – 115_PL_003 B
        - Proposed Site Plan – 115_PL_004 B
        - Proposed Ground Floor Plan – 115-PL-005
        - Proposed Roof Floor Plan – 115-PL-006
        - Existing Elevation ES – 115-PL-010
        - Proposed Elevation NS – 115-PL-011
        - Proposed Elevation NS (1) - 115-PL-016
        - Proposed Elevation EW - 115-PL-012
        - Proposed Elevation EW (1) 115-PL-017

- Proposed Section AB - 115-PL-013
- Proposed Section CD - 115-PL-014
- Proposed Section EF - 115-PL-015
- Section through accessible garden and KLAN5 footpath – 115_PL_021
- Jacksom's Lane – View 5 Site Section – 115_PL_020
- Planting Plan 0 1267-201-P5
- Formal Garden Illustrative Masterplan – 1267-R002-P4
- Landscape General Arrangement Plan – 1267-001-P4
- Illustrative Masterplan – 1267-R001-P4
- Landscape Management Plan – 1267-SP-01-P4
- Establishment of Wildflower Areas – 1267-SP-02-P1
- Statement – Gradients to wheelchair accessible paths – 1267-10-P1
- Wheelchair Accessible Planter – 1267-401-P1
- Arboricultural Impact Assessment - LC 00542 May 2020
- Tree Survey LC 00542 May 2020
- Energy and Sustainability Strategy – P389-R-001 Rev A 290520
- Proposed Site Access Arrangements – S651-10B
- Upbrook House – Updated Submission 240221
- Accessible Design Features Document

- Key lessons will be highlighted, demonstrating how other people can learn from the design.
- During the build process regular updates will be posted on the website, including information from the technical design and construction process and site progress photos and videos.
- A curated collection of construction plans and surveys.
- The project team will be included on the website with their contact details included:
  - Planning Consultant – Savills

- Architect – Blindloss Dawes Architects
- Landscape Designer – Macgregor Smith
- Ecology – GE Consulting
- Landscape Assessment and Tree Survey – Landscape Collective
- Environmental & Sustainability – JS Lewis Ltd
- Accessibility and Inclusion – Sophie Moran Consultant
- Transport, Flooding and Drainage – PFA Consulting

- Once the house is constructed, a virtual tour will be provided allowing people to see the completed design in use.
- The website domain will be upbrookhouse.co.uk
- The website will be go live prior to the commencement of construction and will be maintained for a minimum of five years.

3. Webinar

- A live webinar will take place with the owners, Planners (Savills) and Architects (Bindloss Dawes Architects Ltd).
- A presentation will give an overview of the project and highlights the key lessons learnt.
- A Q&A session will follow, allowing people to engage and develop the discussion further.
- The webinar will be open to anyone who is interested but will target educational institutions. The following organisations will be contacted:
  - School of Architecture, Arts University Bournemouth, **https://aub.ac.uk/course/architecture**
  - School of Art, Design and Architecture, University of Plymouth, **https://www.plymouth.ac.uk/schools/school-of-art-design-and-architecture/architecture**
  - University of West of England, **https://courses.uwe.ac.uk/K100/architecture**
  - Department of Architecture and Civil Engineering, University of Bath, **https://www.bath.ac.uk/departments/department-of-architecture-civil-engineering/**

- School of Architecture, Oxford Brooks University, **https://www.brookes.ac.uk/courses/undergraduate/architecture**

- Wiltshire College, **https://www.wiltshire.ac.uk/**

- The webinar and Q&A session will take place within 3 months of practical completion of construction. It will also be recorded and posted on the website.

4. Checklist

A combination of the issues with current accessible housing and guidance and the process of designing Upbrook house, has resulted in the production of a design checklist/toolkit which was produced as part of the planning application. This should be considered from the outset of any design of future homes in order to contribute to the advocacy of the issue of accessibility.

The checklist provides affordable solutions which can be replicated in future homes, with the potential to create a 'house type' which goes beyond those within adopted guidance, to integrate beautiful, hidden, design solutions. This checklist will be posted on the website.

Examples of items on the checklist include:

- Window sill heights
- Incorporation of treatment space
- Height and depth of raised planters
- Lighting activated by timer / motion detector

An extract of the checklist is included below:

Design features which relate to the structural/layout elements of the development	Design features which are integral to the design of the development
• **Structure and levels of building** o Single storey o Strong ceiling throughout building to allow for track hoist if required in future (capable of accommodating 200kg) o Strength of walls to enable hoists to be attached in the future o Bathroom walls to include built in/moulded concealed handrail through off-set wall to avoid the need for 'bolt on' grab rails • **Layout of building** o Short travel distances – crucial for a disabled person o Close proximity between master bedroom, kitchen, lounge & entrance (pin-wheel design) to minimise travel distance o Head-on access for key rooms o Min 1500mm width corridors o Bin store located near the house entrance for easy access • **Distribution of spaces** o Generous living and circulation spaces o 1100 x 1700mm clear space provided in hallway to allow transfer to second wheelchair o In bedrooms, 2 x 2250 x 2260mm manoeuvring spaces 1 each side of bed	• **Bedroom** o Remote control for lights, curtains, heating, door entry etc. o Grooves in floor finish to easily locate and hold fast the wheelchair when transferring to bed o Electric curtains with control from bed o Concealed drop down rails to provide hidden support • **Bathroom** o Concealed drop down rails o Toilet – at a suitable height and potential to future proof (variable height) o Sufficient space to accommodate a bath in place of level access shower o Wet room constructions with full width shower seats o SMART features integrated into bathroom mirror • **Kitchen** o Continuous section of worktop with hob, appliances and sink in a straight run (min 2200mm length) o Clear leg space provided under worktop at min 700mm o 14000mm pull-out worktops

5. Press Release

Following approval of condition 15 by Wiltshire Council, and prior to the commencement of construction and after the website is live, a press release which summarises the project's journey and includes the website address and architect contact details, will be issued to local publications and groups in addition to the educational organisations set out above:

- Wiltshire Life Magazine
- Your Wiltshire Magazine
- Wiltshire Times
- Gazette & Herald
- This is Wiltshire
- Wilts and Gloucestershire Standard

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- Wiltshire Live

These learning methods showcase the knowledge created by this project, they provide a long-term way of ensuring the lessons learnt are shared with the wider community. Through this dissemination of knowledge, we can create spaces that are truly accessible.

Timescales

The table below outlines the stages at which the learning methods will take place. It is anticipated the construction process will last between 18 – 24 months.

Learning method	Timescale
Site Visit	Within 3 months of practical completion of construction
Virtual Site Visits	Within 3 months of practical completion of construction
Website	Prior to commencement of construction and maintained for a minimum period of 5 years
Webinar	Within 3 months of practical completion of construction
Checklist	Prior to commencement of construction
Press release	Following approval of condition 15, prior to commencement of construction and after the website is live.